



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,058	02/20/2004	Chung-Wen Ko	250122-1240	6848

24504 7590 03/16/2006

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP  
100 GALLERIA PARKWAY, NW  
STE 1750  
ATLANTA, GA 30339-5948

EXAMINER

LIE, ANGELA M

ART UNIT PAPER NUMBER

2821

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/784,058

Applicant(s)

KO, CHUNG-WEN

Examiner

Angela M. Lie

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by May (US Patent 6211613).

As to claim 1, May discloses an organic electroluminescent display, comprising: an organic electroluminescent display (OLED) panel (column 6, lines 21-25); a reflective sheet (Figure 1, element 10); and a brightness regulating film (column 1, lines 59-62) for light transmission between the organic electroluminescent display panel and the reflective sheet (column 6, lines 21-29).

As to claim 2, May discloses the display wherein the organic electroluminescent display panel further comprises: a transparent substrate (Figure 1, element 12), a first transparent electrode (Figure 1, element 4) over the transparent substrate; a light emitting layer (column 6, lines 22-26) over the transparent electrode; and a second transparent electrode over the light emitting layer (Figure 1, element 2).

As to claim 3, May discloses the display wherein the light-emitting layer is an organic electroluminescent film (column 6, lines 21-26).

As to claim 4, May discloses the display wherein the brightness regulating film is an optical slit to control light transmission from the environment (Figure 1, element 14).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over May (US Patent 6211613) in the view of Richard (US Patent 6759945).

As to claims 5 and 6, May teaches all the limitations disclosed in claim 4 except for the brightness regulating film being made of electrochromic or liquid crystal capable for controlling light transmission thereon by adjusting current applied thereto. Richard teaches a variable transmittance device comprising a super-twisted nematic (STN) liquid crystal cell connected to the adjustable voltage source and photo sensor, so that

transitivity of STN can be adjusted based on detected light. It would have been obvious to one of the ordinary skill in the art during the time the invention was made to incorporate Richard's light adjustment means into the display as taught by May (i.e. replace the existing polarizer) because brightness regulating means taught by Richard increase the contrast of the display independently of the ambient light, furthermore the brightness regulating mechanism allow fast response, good viewing angle and high tolerance of temperatures (column 3, lines 1-10). With respect to claim 6, a photo sensor to detect light intensity of the environment is necessary to the device as described above. Richard teaches two photo sensors connected to the STN, wherein one of those sensor is used to detect ambient light.

As to claim 7, Richard teaches the device wherein the brightness regulating film adjusts the light transmission intensity from the environment according to a light intensity of the environment detected by the photo sensor (column 3, lines 33-57).

As to claim 8, May teaches all the limitations presented in claim 1 except for the brightness regulating film adjusting a light-transmitting mode thereof by controlling current intensity applied thereon according to a light intensity of the environment as detected by the photo sensor. Richard teaches a super-twisted nematic liquid crystal connected to the photo sensors and adjustable voltage supply. As the light detected by photo sensors changes control voltage is also changed and this causes change in the STN liquid crystal transitivity (reflectance). It would have been obvious to one of the ordinary skill in the art during the time the invention was made to incorporate Richard's light adjustment means into the display as taught by May (i.e. replace the existing

polarizer) because brightness regulating means taught by Richard increase the contrast of the display independently of the ambient light, furthermore the brightness regulating mechanism allow fast response, good viewing angle and high tolerance of temperatures (column 3, lines 1-10).

### ***Response to Arguments***

6. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new grounds of rejection.

### ***The Prior Art***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Publication 20040066123 disclosed an organic electroluminescent display comprising a substrate, two transparent electrodes, organic electroluminescent material and a reflective sheet.
- US Patent discloses optical panel capable of switching between reflective and transmissive modes.

### ***Inquiry***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela M. Lie whose telephone number is 571-272-8445. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Angela M Lie

TRINH DINH  
PRIMARY EXAMINER

